

CLAIMS

1. A mobile concrete pump provided with a chassis (12) supportable on a substrate via support struts (14, 16), with a concrete distribution boom (28) arranged on the chassis (12), with a distribution boom (28) rotatably mounted to a distribution block (32) and supportable in the transport position on a chassis-fixed a boom support unit (40), and with a conveying conduit (26) connected to the pressure side of the concrete pump and running along the distribution boom (28), thereby characterized, that the boom support unit (40) includes a housing part (44) which projects above the chassis (12), which is accessible from the outside via at least one closeable opening (46, 48) and has on the upper side thereof at least one support block (50) for supporting the distribution boom.
2. Mobile concrete pump according to Claim 1, thereby characterized, that control devices for controlling the pumps (56) are provided in the housing part (44).
3. Mobile concrete pump according to Claim 1 or 2, thereby characterized, that the housing part (44) includes a first and a second frame part (52, 54), that the first frame part is provided fixed to the chassis and carries internally the control devices, and that the second frame part (54) is removable from the first frame part (52) and carries at least one support block (50) on its top side.
4. Mobile concrete pump according to Claim 3, thereby characterized, that the frame parts (52, 54) respectively have a L-profiles which compliment each other to form a rectangular housing profile.

BEST AVAILABLE COPY

5. Mobile concrete pump according to Claim 4, thereby characterized, that the at least one support block (50) is provided on the outside of the upper L-shank (64) of the second frame part (54).
6. Mobile concrete pump according to Claim 4 or 5, thereby characterized, that the upper L-shank (64) of the second frame part (54) exhibits a hole pattern for securing support blocks (50) of different design and/or size.
7. Mobile concrete pump according to one of Claims 4 through 6, thereby characterized, that the first frame part (52) exhibits, preferably on its side L-shank, a mounting device (54) for a section of the conveying conduit (26) connected to the vehicle chassis.
8. Mobile concrete pump according to one of Claims 4 though 7, thereby characterized, that the second frame part (54) exhibits, preferably on its side L-shank (76), a mounting device (78) for a hose.
9. Mobile concrete pump according to one of Claims 4 though 8, thereby characterized, that the second frame part (54) exhibits, preferably on its side L-shank, an access opening (48) lockable via a lid.
10. Mobile concrete pump according to one of Claims 4 through 9, thereby characterized, that the second frame part (54) exhibits, preferably on its upper L-shank (64), a mounting device for a spray shield.
11. Mobile concrete pump according to one of Claims 3 through 10, thereby characterized, that the first frame part (52) is provided with a rubber skirt (70) on its rear area.

12. Mobile concrete pump according to one of Claims 1 through 11, thereby characterized, that the boom support unit (40) is provided in the area between a material supply container (24) of the thick matter pump (22) and a vehicle chassis fixed water tank (42).
13. Mobile concrete pump according to one of Claims 1 through 12, thereby characterized, that the boom support unit (40) is associated with a switch element (72) actuatable by the lying thereupon of the distribution boom (28), via which the operation of the support outriggers (14, 16) can be cleared or unlocked.
14. Mobile concrete pump according to one of Claims 1 through 13, thereby characterized, that at least parts of the housing part (44) and/or the support block (50) of the boom support unit (40) are comprised of a light construction material.
15. Mobile concrete pump according to Claim 14, thereby characterized, that the light construction material is comprised of a fiber reinforced plastic, in particular carbon fiber reinforced plastic or glass fiber reinforced plastic.
16. Mobile concrete pump according to Claim 14, thereby characterized, that the light construction material is a metal foam, preferably with aluminum or titanium components.
17. Mobile concrete pump according to one of Claims 14 through 16, thereby characterized, that the light construction material of the housing part (44) and/or the support block (50) has a friction resistant and/or hard coating.

18. Mobile concrete pump according to Claim 17, thereby characterized, that the coating is comprised of chrome, aluminum, silicon carbide or ceramic.
19. A mobile concrete pump provided with a chassis (12) supportable on a substrate via support struts (14, 16), with a concrete distribution boom (28) arranged on the chassis (12), with distribution boom (28) rotatably mounted to a distribution block (32) and supportable in the transport position on a chassis-fixed a boom support unit (40), and with a conveying conduit (26) connected to the pressure side of the concrete pump and running along the distribution boom (28), thereby characterized, that the boom support unit (40) carries a switch element (72) actuatable by lying thereupon of the distribution boom (28), via which the actuation of the support outrigger (14, 16) is cleared or unlocked.
20. Boom support unit for a distribution boom of a mobile concrete pump, characterized by a housing part (44), which is accessible from outside via at least one lockable opening (46, 48) and is provided in its upper part with at least one support block (50) for supporting the distribution boom (28).
21. Boom support unit according to Claim 20, thereby characterized, that the housing part (44) is provided with control devices for control of the pump (56).
22. Boom support unit according to Claim 20 or 21, thereby characterized, that the housing part (44) includes a first and a second frame part (52, 54), that the first frame part carries internally the control device and that the second frame part (54) is removable from the first frame part (52) and carries on its top side the at least one support block (50).

23. Boom support unit according to Claim 22, thereby characterized, that the frame parts (52, 54) respectively exhibit an L-profile, complimenting each other to form the perimeter of a rectangular housing.
24. Boom support unit according to Claim 23, thereby characterized, that at least one support block (50) is provided on the outside of the upper L-shank (64) of the second frame part (54).
25. Boom support unit according to Claim 23 or 24, thereby characterized, that the upper L-shank (64) of the second frame part (54) exhibits a hole pattern for the securing of support blocks (50) of different design and/or different size.
26. Boom support unit according to one of Claims 23 through 25, thereby characterized, that the first frame part (52) exhibits preferably on its sides L-shank a mounting device for a conveying conduit (26).
27. Boom support unit according to one of Claims 23 through 26, thereby characterized, that the second frame part (54) exhibits preferably on its side L-shank (76) a mounting device (78) for a hose.
28. Boom support unit according to one of Claims 23 through 27, thereby characterized, that the second frame part (54) exhibits preferably on its side L-shank an access opening (48) lockable via a lid.
29. Boom support unit according to one of Claims 23 through 28, thereby characterized, that the second frame part (54) exhibits, preferably on its upper L-shank (64), a mounting device for a spray shield.

30. Boom support unit according to one of Claims 22 through 29, thereby characterized, that the first frame part (52) has on its rear area a rubber skirt (70).
31. Boom distribution unit according to one of Claims 20 through 30, thereby characterized, that the boom support unit (40) carries a switch element (72) actuatable by the lying thereupon of the distribution boom (28).
32. Boom support unit according to one of Claims 20 through 31, thereby characterized, that at least parts of housing (44) and/or the support block (50) of the boom support unit (40) are comprised of the light construction material.
33. Boom support unit according to Claim 32, thereby characterized, that the light construction material is comprised of a fiber reinforced plastic, in particular, carbon fiber reinforced plastic or glass fiber reinforced plastic.
34. Boom support unit according to Claim 32 or 33, thereby characterized, that the light construction material is comprised of the metal foam, preferably with aluminum or titanium components.
35. Boom support unit according to one of Claims 32 through 34, thereby characterized, that the light construction material of the housing part (44) and/or the support block (50) carries a friction resistant and/or hard coating.
36. Boom support unit according to Claim 35, thereby characterized, that the coating is selected from the group consisting of chrome, aluminum, silicon carbide and ceramic.